

with a pink tinge, 6–7 mm. across, 5 mm. long, the petals somewhat less than twice as long as the sepals, and the pedicels glandular-pubescent.

### 3. ADDITIONS TO THE FLORA OF THE CHICAGO REGION

The following records were not included by Jones et al. in their *Vascular Plants of Illinois* or have been collected since the work was in press.

***Populus canescens*** (Ait.) Sm.

The data for this collection are as follows: open ground of Illinois Beach State Park, south of main parking lot near Lake Michigan, north of Waukegan, Lake Co., Sept. 10, 1955, *Swink 2780*.

***Dianthus deltoides*** L. This has been collected at the following locality: openings in level woods, Aurora, Kane Co., 1937–38, *Gordon Pearsall*.

***Silene regia*** Sims. The following specimen collected in northern Illinois is considerably north of its known range: roadside, highway 45, Will Co., July 24, 1931, *Carl Buhl 395*.

***Paronychia fastigiata*** (Raf.) Fernald (typical). The data for this collection are: Riverside, Cook Co., Sept. 26, 1885, *W. C. Ohlendorf*.

***Lotus corniculatus*** L. The data for this collection are: Hopkins Park, Kankakee Co., July 15, 1955, *Karl Bartel*.

***Eupatorium coelestinum*** L. The data for this collection are: Forest preserve near Riverside, Cook Co., 1937–38, *Gordon Pearsall*.

***Hypochaeris radicata*** L. The data for this collection are as follows: Arlington Heights, Cook Co., Sept. 10, 1929, *H. C. Benke 4929*. The 1929 collection is apparently the earliest record noted for this species in the Chicago area. It has been seen since in and around the city of Chicago along highways and boulevards, but the regular mowing along these highways prevents the plants from flowering.—CHICAGO NATURAL HISTORY MUSEUM AND COLLEGE OF PHARMACY, UNIVERSITY OF ILLINOIS, CHICAGO.

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## CAREX MOLESTA IN MASSACHUSETTS

RICHARD J. EATON

AMONG a number of specimens collected some years ago and set aside for later study is a *Carex* § *Ovales*. By using Fernald's key in Gray's *Manual* 8th Ed., it seemed to run down to *C. molesta* Mackenz. unequivocally. However, this species is not represented at all in the herbarium of the New England Botanical Club, and by specimens in the Gray Herbarium (annotated by Fernald in 1941) from only two New England stations: one from Lake Champlain, Vermont, and one from Hartford County, Connecticut. In contrast, there are specimens from seventeen localities in New York State. Being unfamiliar with it myself, I decided to solicit expert opinion from Drs.

H. K. Svenson and F. J. Hermann. They are in agreement that my specimen should be referred to *C. molesta*, although Dr. Hermann writes that it is not typical compared with the plant of the mid-West. Accordingly, I am placing it in the Club Herbarium under that name, with the accompanying data: Moist field in rear of Old Manse, Concord, Massachusetts, *R. J. Eaton*, 17 June 1934. It is annotated by Hermann as "atypical".

When Mackenzie (1931) published *C. molesta* he cited the type collection as from Wyandotte County, Kansas, and the distribution: "Dry woodland, N. Y. to Kansas and Nebraska", omitting any reference to its nearest affinities. However, his key clearly indicated that he considered *C. brevior* to be its closest relative and separable from it chiefly by the shape, texture and nervation of the perigynia. He placed it in a group of closely allied species of the series Festucaceae in the following order: *C. tenera*, *C. tinctoria*, *C. normalis*, *C. festucacea*, *C. molesta*, *C. brevior*. This order, incidentally, is followed in Gray's Manual.

Gates (1940) reduced it to an infraspecific status as *C. brevior molesta*. Fernald (1950), whose knowledge of *Carex* in the Gray's Manual range was profound, maintained the species but with a broader concept of its definition and range. He amplified Mackenzie's description in respect to key characters and stated its distribution to be "dry or slightly moist open ground, borders of woods, etc., Mass. and Vt. to Sask., s. to Del., D. C., Tenn., Ark., Kans., and Colo." Gleason (1952), on the other hand, following Gates, united *C. molesta* with *C. brevior* as scarcely specifically distinct, and even suggested that the former might be a hybrid with *C. normalis*.

Dr. Hermann writes me that in his experience the two are sharply distinct in the mid-West and as far east as Pennsylvania and western New York, but in New England transitional forms, mostly referable to *C. brevior*, seem to be the rule. However, in 1954, he collected *C. molesta* in Litchfield County, Conn., at what appears to be the second known station for the species in that state.

At the Gray Herbarium there are about 102 sheets in the *C. molesta* folders, of which 49 were annotated "C. brevior, K. M."

(presumably in 1915 or thereabouts) and re-annotated "C. molesta M. L. F. 1941" (7 merely bearing the words "C. molesta" in Fernald's handwriting). There are 16 additional sheets annotated by Fernald, but apparently not seen by Mackenzie. With a very occasional exception all this material had been originally determined as *C.* (spp.) var. *brevior*. Thus there seems to be ample material, even at a single institution, on which to base a judgment about the proper rank to assign to this taxon. Also, it seems reasonable to infer that *C. molesta* is in actuality a taxonomic segregate from *C. breviar*, despite Mackenzie's silence on the point.

Judging from its representation in the Gray Herbarium, the New York Botanical Garden and the National Herbarium, *C. molesta* is rare east of the Hudson River. I have been unable to trace Fernald's authority for including Massachusetts in its range. That it should turn up in Concord emphasizes again the truism that novelties are always possible even in the most thoroughly botanized localities.

Apropos Gleason's tentative suggestion that we are possibly dealing with a hybrid between *C. normalis* and *C. breviar*, it is well to bear in mind that hybrids in the genus *Carex* are generally considered to be rare and almost always infertile. The ample material at the Gray Herbarium is quite inconsistent with such a hypothesis in the case of *C. molesta*. There appears to be little reason for not accepting Dr. Hermann's conviction that it is a distinct and stable species west of New York, with transitional forms confined chiefly to the northeast periphery of its range. This is contrary to expectation were we dealing with a hybrid. In this connection I have secured his permission to quote from a recent letter to me as follows:

"But no such theory (hybridity) is required, it seems to me, to explain the prevalence of transitional forms in a part of the geographic range of a taxon and their absence from other parts. It is rather generally held, I believe, that in the origin of species, whether the means be hybridity, natural selection or any others, the change is gradual (except in cases of mutation). The differences between daughter- and parent-species are at first bridged by innumerable intermediary types, so at this stage we have not distinct species but a variety or, as the moderns prefer to dub it, a subspecies. Later when the transitional forms have either entirely disappeared, or practically so except in a local section of its total area,

the taxon becomes a species. (This concept is pretty well developed by G. Einar Du Rietz in his "Fundamental Units of Biological Taxonomy", *Svensk Botanisk Tidskrift* 24: 333-428. 1930.) So when a species has not quite become finally demarcated, as in the case of *C. molesta*, an occasional intermediate is to be expected and such intermediates are quite likely to be concentrated in some portion of its geographic range. In my experience they seem to occur chiefly at the periphery of the range, at the portion relatively recently invaded by the species and farthest from its center where it has been longest established and where the distinctions are most pronounced and stable (in this case Kansas and Nebraska). A similar case is that of *Juncus dudleyi* which, although amply distinct from *J. platyphyllus* in the New England States, breaks down completely in the Southwest where transitional forms outnumber the sum of extremes."—LINCOLN, MASSACHUSETTS.

#### LITERATURE CITED

- FERNALD, M. L. 1950. Gray's Man. Bot. 8th Ed. 1950, p. 326.  
 GATES, F. C. 1940. Trans. Kansas Acad. Sci. 42: 135.  
 GLEASON, H. A. 1952. The New Britt. & Br. Illus. Fl. I: 325.  
 MACKENZIE, K. K. 1931. No. Am. Fl. 18: 122, 151.

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### A NEW SPECIES OF TERNSTROEMIA FROM JAMAICA, B. W. I.

CLARENCE E. KOBUSKI

BOTANICALLY speaking one of the least explored areas on the island of Jamaica is the John Crow Mountain range in the parish of Portland at the eastern end of the island. This range, a rugged limestone tilted plateau, reaches an elevation of 3800 ft. No roads cross it and even access to its slopes is limited to trails. Because of their location the John Crow Mountains are the first to intercept the rain laden northeast trade winds and for this reason the rainfall in the mountains is heavy. Reasonable estimates place the annual rainfall near the crest at 300 inches while even the driest location near the coast at Priestman's River where records are kept reveal an annual precipitation of 100 inches. The heavy rainfall has eroded the limestone rock into a treacherous dogtooth or honeycomb surface which makes travel both dangerous and exhausting. For reasons of limited accessibility, difficult travel and heavy rains, few botanists have ventured in the John Crow Mountains and relatively few botanical records are available. Britton